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A.D. 1861, 19<sup>th</sup> APRIL. N° 972.

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S P E C I F I C A T I O N

OF

JOHN JOBSON.

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APPARATUS FOR CONSUMING SMOKE.

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L O N D O N :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,  
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Price 5d.

1861.







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A.D. 1861, 19th APRIL. N° 972.

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Apparatus for Consuming Smoke.

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*(This Invention received Provisional Protection only.)*

PROVISIONAL SPECIFICATION left by John Jobson at the Office of the Commissioners of Patents, with his Petition, on the 19th April 1861.

I, JOHN JOBSON, of Derby, in the County of Derby, Ironfounder, do hereby declare the nature of the said Invention for "CERTAIN IMPROVEMENTS IN APPARATUS TO BE EMPLOYED IN CONNECTION WITH CORNISH AND OTHER SIMILAR BOILERS FOR THE PURPOSE OF CONSUMING THE SMOKE," to be as follows, that is to say :—

This Invention consists of certain apparatus by which the fire in Cornish and other similar boilers is fed from underneath, thus causing the smoke from the fresh charges to pass through the bright fire on top. To effect this, I employ a second set of fire-bars extending beyond the bridge, and attached to the front set of bars. These front bars are made in two parts longitudinally, each part being capable of lowering at one side from the centre towards the periphery of the furnace, or in the reverse direction, describing an arc from the point at which the bars meet horizontally to that at which they would rest when charging the fire, two chambers are formed in the furnace, thus (*a, a,*) [see Drawing], these receive the fresh charge of fuel when the fire requires it.

In charging, the whole apparatus is drawn forward from the furnace door by means of a rack and pinion worked by a winch. The charging chamber being mounted upon A-wheels running upon a A-rail secured to the bottom of the furnace. The old fire is received and kept up by the supplemental bars at the end of the front set, whilst fresh fuel is being supplied. The front bars are then turned down right and left by means of a spur wheel and pinion, and

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*Jobson's Improvements in Apparatus for Consuming Smoke.*

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the fuel fed in upon the bars, the apparatus is returned into the furnace, the supplemental bars return to their position beyond the bridge, and the bright fire is received upon the fresh charge. As this is being consumed, the stoker by means of the spur wheels and pinions occasionally raises the front bars towards the horizontal position until a fresh charge is required. The smoke 5 from the fresh fuel is thus caused to pass through a bright fire, and the operation of stoking much less frequently required.

I do not confine myself to the exact mechanical appliances herein named, for working the apparatus.

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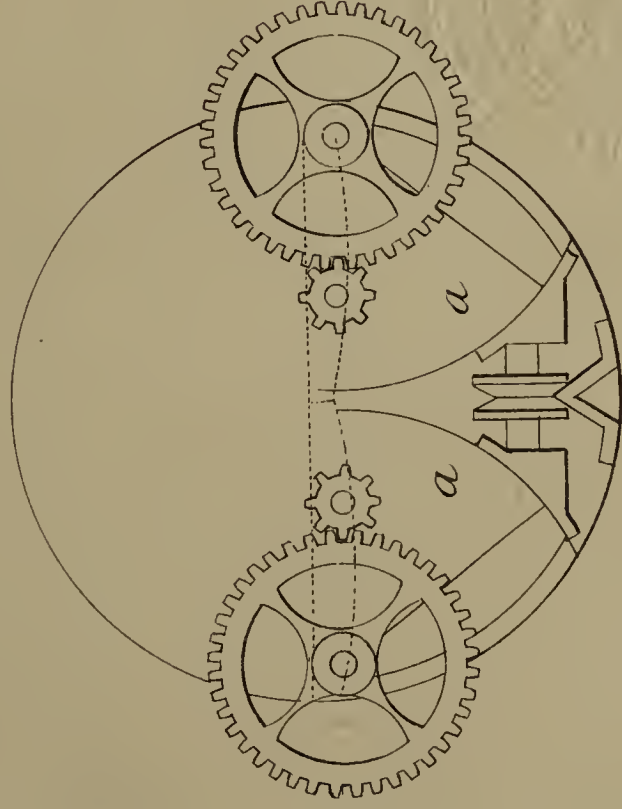
LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1861.



A. D. 1861, APRIL 19, N<sup>o</sup> 972.  
JOBSON'S PROVISIONAL SPECIFICATION.

( 1 SHEET . )



*The drawing in the Provisional Specification is not colored.*

Drawn on Stone by Malby & Sons.

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